

TRANSMITTAL LETTER TO THE UNITED STATES

06007/38172

DESIGNATED/ELECTED OFFICE (DO/EO/US)

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR

CONCERNING A FILING UNDER 35 U.S.C. 371

10/049915

INTERNATIONAL APPLICATION NO.
PCT/GB00/03049INTERNATIONAL FILING DATE
August 8, 2000PRIORITY DATE CLAIMED
August 13, 1999

TITLE OF INVENTION

READING/TEACHING AID

APPLICANT(S) FOR DO/EO/US

Arvind Khandubhai Mistry

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
 - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ has been communicated by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☒ is attached hereto.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
 - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
 - b. ☐ have been communicated by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 20 below concern document(s) or information included:

13. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
20. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
22. ☒ Certificate of Mailing by Express Mail
23. ☒ Other items or information: General Authorization;
PCT Forms 401; 332; 409; 408; 101; 301; 304;
Cover sheet of WO 01/13348 A3

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PCT/GB00/03049

ATTORNEY'S DOCKET NUMBER
06007/38172

24. The following fees are submitted:

CALCULATIONS PTO USE ONLY

BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) :

- ☒ Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1040.00
- ☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$890.00
- ☐ International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$740.00
- ☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$710.00
- ☐ International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

\$1040.00 ~~\$0.00~~

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).

\$0.00

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE
Total claims	36 - 20 =	16 9	x \$18.00
Independent claims	5 - 3 =	2 0	x \$84.00
Multiple Dependent Claims (check if applicable).			<input checked="" type="checkbox"/>
			280.00 \$0.00

TOTAL OF ABOVE CALCULATIONS =

\$1776.00 ~~\$0.00~~

☒ Applicant claims small entity status. See 37 CFR 1.27). The fees indicated above are reduced by 1/2.

\$888.00 ~~\$0.00~~

SUBTOTAL =

\$888.00 ~~\$0.00~~

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492 (f)).

\$0.00

TOTAL NATIONAL FEE =

\$888.00 ~~\$0.00~~

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable).

☐

\$0.00

TOTAL FEES ENCLOSED =

\$888.00 ~~\$0.00~~

Amount to be:
refunded

\$

charged

\$

- a. ☒ A check in the amount of \$888.00 to cover the above fees is enclosed.
- b. ☐ Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 13-2855 A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

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SIGNATURE

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NAME

26,910

REGISTRATION NUMBER

Feb. 13, 2002

DATE

Title: Reading/Teaching Aid

Description of Invention

This invention relates to a device which may be used for aiding poor readers to improve their reading ability, and to enable competent readers too, to improve their reading ability.

The amount of printed matter is ever increasing, as is the requirement to read text on a computer screen accurately and efficiently. There are two elements to efficient reading namely reading speed, and comprehension of what is being read.

When reading, a reader's eyes move relative to stationary text. The reader's eyes do not move smoothly along the text, but rather perform a series of jerky movements consisting of jumps and stops. It is during the stops that information is taken into the brain. During reading, words tend not to be read one word at a time, but as a group of words along a line.

In the case of a poor reader, the jumps and stops do not flow along the lines of text, but sometimes backtrack and back skip. A backtrack is when the eyes jump backwards to what has been read, and a back skip is when the eyes jump backwards more than just the last group of read words. The back skip can be along a line, over several lines, or even may be a paragraph of the text.

In the case of a good reader though, the eyes are trained to move with longer jumps and hence there are less stops, for there are shorter pauses for the stops, and less or no backtracking or back skipping. Such eye movements enable information to be more smoothly conveyed to the brain, such improved presentation enables improved comprehension of the text being read.

It is common practice for a reader to use a pointer whilst reading, the pointer pointing to individual words as they are read.

According to a first aspect of the invention I provide a method of reading using a reading aid including a handle part which is adapted to be gripped manually at a location spaced from text to be read, and a cursor part attached to the handle part and extending transversely thereto, the handle part and the cursor part being attached by a joint which permits the handle part to be moved relative to the cursor part during reading, the cursor part being positionable by manipulating the handle part to indicate a part of a line of the text being read, the method including moving the cursor part along the line and/or down the text during reading to indicate successive words or groups of words, whilst manipulating the handle part relative to the cursor part so that the handle part is maintained out of the reader's line of sight whilst the cursor part is maintained generally flat against the text.

Thus by performing the method of the invention, a reader may be trained to read without backtracking and back skipping, and by moving the cursor part appropriately relative to the text, reading speed and comprehension may be improved.

Preferably the handle part is thin so that the handle part does not obscure the text being read. The handle part and the cursor part may be attached by a joint which permits the handle part to be moved universally relative to the cursor part during reading. Alternatively, the handle part and the cursor part may be attached by a joint that permits substantially universal movement of the handle part with respect to the cursor part, but restricts rotation of the handle about a longitudinal axis of the handle part.

The handle part may be attached approximately centrally along the length of the cursor part. Hence the reader's eyes are encouraged to concentrate on the centre of the text being read.

The method may be applied to the reading of any text, including the reading of text from computer screens. However the invention is particularly useful for reading columns in newspapers and magazines, in which case the

cursor part may be of a length substantially equal to the width of the columns being read. Thus a reader may be encouraged to read a group of words consisting of the entire line of the column.

Alternatively, the cursor part may have a length of greater than two words of average length of text.

It will be appreciated, however, that for readers of different ability, and/or for reading different text, ideal cursor part lengths may differ. Accordingly in a preferred embodiment, the reading aid may have separable handle and cursor parts, and may be made of a cursor part selected from a set of cursor parts of different configuration, by attaching the selected cursor part to the handle part.

In each case, the cursor part of the reading aid may be opaque in which case the cursor part is, during performance of the method, positioned beneath or above the word or groups of words to be indicated, or a portion of the cursor part may be transparent so that the method may include positioning the cursor part relative to the text such that at least a portion of the line of text to be indicated is visible to the reader through the transparent portion. In yet another arrangement, the cursor part may include a frame through which text may be read.

The method may include adjusting the length of the handle part to suit an individual reader and/or to enable the length of the handle part to be extended from a retracted stowed position for use. The method may include unfolding the cursor part from a stowed position in which the cursor part and handle part are substantially parallel, to a position for use where the cursor part extends at substantially right angles relative to the handle part.

The cursor part may be a unitary structure, or may include a pair of relatively foldable wings which may be folded so as to extend generally parallel to the handle part.

The cursor part may be configured to form an image that may be appealing to children.

According to a second aspect of the invention I provide a reading aid for use in the method of the first aspect of the invention.

The aid may include a writing implement such as a highlighter, integrally provided with the handle part. For example, a writing point may be provided at an end of the handle part remote from the cursor part, or the handle part may include a main stem and a branch including the writing implement.

According to a third aspect of the invention, I provide a reading aid including a cursor part and a handle part, the cursor part being attached to the handle part by a joint, the joint being configured to permit substantially universal movement of the handle part with respect to the cursor part, about a longitudinal axis of the handle part.

According to a fourth aspect of the invention, I provide a reading aid including a cursor part and a handle part, the cursor part being configured to form an image which may be attractive to children.

According to a fifth aspect of the invention I provide a computer when programmed to aid reading or to train a reader, there being means to display on a display screen of the computer concurrently with displaying on the display screen text to be read, a cursor, the computer being programmed to position the cursor to indicate a word or group of words of the line of the text being read and to move the cursor along the line during reading successively to indicate groups of words.

Preferably the computer is programmed so that the speed at which the cursor is moved along the line of text and/or the number of words indicated may be changed as a reader's ability improves.

The computer may be programmed to move the cursor relative to the text being read in a predetermined path over the text as a whole in such manner as to improve the speed of the reading.

Although the cursor may simply indicate the word or group of words, for example by underlining, or emboldening the group of words, the cursor may frame the word or group of words.

In one arrangement text which is framed may be enlarged compared within the remaining text. This is particularly useful when reading small font text e.g. in cells in spreadsheets.

The cursor may form an image which may be attractive to children.

According to a sixth aspect of the invention, we provide a method of operating a computer according to the fifth aspect of the invention including the steps of moving a cursor relative to text to be read on a display screen, successfully to indicate words or groups of words of a line of text to be read.

The method of the sixth aspect of the invention may include changing the size and/or shape and/or colour of the cursor to suit different reader's abilities and/or the nature of the text being read.

According to a seventh aspect of the invention we provide a method of assessing reading ability including the steps of displaying on a computer display screen concurrently with text to be read, a cursor, manually moving the cursor relative to the text to indicate lengths of the text sequentially being read, and analysing from the speed and sequence of cursor movements, reading ability.

The invention will now be described with reference to the accompanying drawings in which:-

FIGURE 1 shows a reading aid of the second aspect of the invention in use.

FIGURES 2 to 11 show various embodiments of reading aids for use in the method of the first aspect of the invention.

Referring to figure 1 there is shown a page 10 of text to be read, the text consisting of individual words arranged in lines down the page 10. The page

may be a page of text of a printed publication such as a newspaper, magazine or book, or text on a computer screen.

To promote efficient reading, a reading aid 12 is used, the reading aid 12 including a handle part 14 which is long and thin and in this embodiment is of fixed length, and a cursor part 15 attached to the handle part 14 by means of a joint 18. In this example, the handle part 14 is joined to the cursor part 15, with the cursor part 15 extending generally normally relative to the handle part 14 and being positionable by manipulating the handle part 14 to indicate a part of a line of the text being read. Also in this example, the cursor part 15 extends for a length greater than two words of average length of the text, however, the length of the cursor part 15 may be greater or smaller than this.

The method of the invention is performed by a reader grasping the handle part 14 at a position spaced from the text 10, and with the cursor part 15 positioned beneath or above a line of the text to indicate a word or group of words, as the reader reads, the cursor part 15 is moved along the line of text and down the text by manipulating the handle part 14 and the joint 18, so that the reader's eyes are deterred from backtracking or back skipping, and are encouraged to move in regular jumps or continuously along the line of text, in one direction.

In the remaining figures, different embodiments of reading aid 12 are illustrated, and similar parts to the reading aid 12 of figure 1 are indicated by the same reference numerals.

In figure 2, the cursor part 15 is attached to the handle part 14 by a joint 18 which permits of generally universal movement of the cursor part 15 relative to the handle part 14 so that the handle part 14 may be maintained out of a reader's line of sight of the words indicated by the cursor part 15 during reading, particularly as the cursor part 15 is moved down the text. In figure 3, one example of a suitable universal joint 18 is shown, in which the cursor part 15 has secured thereto a ball formation 19, and the handle part 14 has an

internal longitudinal part 21 terminating in a cup 22. The cup 22 and ball formation 19 may be brought into tight engagement by moving the internal part 21 longitudinally relative to an outer handle part 25, in the direction of the arrow A. This may be achieved by a screw connection between the internal part 21 and the outer handle part 25, or by interengaging ratchets or otherwise.

Thus by tightening the engagement of the ball formation 19 and the cup 22, the position of the cursor part 15 may be releasably fixed to the handle part 14.

Figure 4 shows a similar but opposite arrangement in which the cup 22 is provided on the cursor part 15 and a ball formation 19 is provided at the end of an internal part 21 of the handle part 14.

Figure 5 shows an alternative arrangement in which an internal part 21 of the handle part 14 terminates in a plurality of jaws 26 which may be closed about a ball configuration part 19 of the cursor part 15, e.g. by actuating by rotation or longitudinal movement, an actuator within the internal part 21 of the handle part 14.

Figure 6 illustrates a universal joint arrangement 18 in which the handle part 14 has an integral ball formation 19 and the cursor part 15 has a recess formation 30, the ball 19 and recess 30 formations being snap interengageable.

In the embodiments so far described with reference particularly to figures 5 to 6, because the cursor part 15 and handle part 14 are separable it will be appreciated that by providing a set of cursor parts 15 of different dimension (lengths) and configuration, a reading aid 12 suitable for a particular reader may be made up, or a reading aid 12 suitable for aiding reading of particular text, such as a column of a newspaper, in which case a cursor part 15 of a width corresponding to the width of the column may be selected.

Figure 7 illustrates an arrangement in which the cursor part 15 is not separable from the handle part 14, but the cursor part 15 includes a pair of wings 33 which may be folded from an outwardly extending condition for use,

to the folded condition shown in which the wings 33 extend generally parallel to the handle part 14. In this embodiment, at an end of the handle part 14 remote from the cursor part 15, there is provided a writing point 34 of a writing implement such as a highlighter which is integrally provided within the handle part 14.

In figure 8, an alternative arrangement for including a writing implement is illustrated. In this arrangement, the handle part 14 has a main stem 35 which is grasped by a reader during reading, and a branch 36 which includes a writing implement 37 such as a highlighter with a writing point 34. In the embodiment illustrated, the branch is pivotal relative to the main stem 35 about a pivot B so that the writing implement 37 may be folded alongside the main stem 35, or into a recess of the stem 35 when not in use, or pivoted outwardly for use. In another arrangement the writing implement 37 may be provided in the main stem 35 and the cursor part 15 on the branch 36. Such latter arrangement enables a user to exercise more control over the use of the writing implement 37 than where the writing implement 37 is provided on the branch 36. In each case, instead of being pivoted, the branch 36 and main stem 35 may be relatively fixed.

Figures 9 and 10 illustrate an alternative embodiment of the invention, in which the cursor part 15 is connected to the handle part 14 by means of a joint 18 which would be universal, as illustrated in Figures 3 to 6, were it not for the provision of a restraining part 38, which restricts rotation of the handle part 14 about a longitudinal axis A of the handle part 14. By virtue of the restraining part 38, the user may more easily maintain the cursor parallel to lines of text when moving the reading aid 12 over a page.

The restraining part 38 is wire bent into a generally semi-circular configuration, which extends through an aperture 39 provided in the handle part 14. The restraining part 38 is pivotally connected to the cursor part 15, at a first 40 and second 41 end, by two attachment means 42, 43.

In order to engage with the attachment means 42, 43, the ends 40, 41 of the restraining part 38 may be bent radially outwardly of the semi-circle formed by remainder of the restraining means 38, as shown in Figure 9, or may be bent radially inwardly of the semi-circle, as shown in Figure 10. The universal joint 18 is located generally centrally between the two attachment means 42, 43, and generally at the centre of the semi-circle formed by the restraining part 38.

The attachment means 42, 43 are oriented with respect to the cursor part 15 such that the restraining part 38 may pivot about an axis parallel to a longitudinal axis of the cursor part 15. The clearance between the handle part 15 and the restraining part 38 provided by the aperture 39 allows movement of the restraining part 38 within the aperture 39, and therefore allows pivoting of the handle part 14 about the universal joint 18 with respect to the restraining part 38. Thus, the restraining part 38 acts only to restrict rotation of the handle part 14 relative to the cursor part 15 about its longitudinal axis A.

In Figure 11, an alternative configuration of cursor part 15 is illustrated. In this embodiment the reading aid 12 is intended for use by a child, and the cursor part 15 is configured to resemble a paw print of a bear. The cursor part 15 may be configured to form any other image that may be popular with children, for examples, an animal, a cartoon character, or a football player. Such a cursor part configured to form a popular image may be used in any of the above embodiments of the invention.

If desired, a method of assisting reading may be performed on a computer by concurrently displaying with text on a display screen, a cursor to indicate a group of words in a line of text to be read. In such an arrangement, the cursor displayed may have a length greater than two words of average length of the text, but could also be shorter than this. The computer may be arranged to move the cursor relative to the text, or the cursor may be moved under the control of a reader. If desired, the speed of movement of the cursor

relative to the text may be voice controlled, where the reader is reading out loud, or controlled using a pointing device such as a mouse.

The computer when in control, may move the cursor at an optimum speed for the reader's ability, and the speed may be changed as the reader's ability improves.

Thus the computer may be arranged to assess the reader's ability by the reader controlling the cursor movement during an assessment, either using a pointing device such as a mouse, trackball or the like, or by voice actuated control, and the computer being programmed to analyse the cursor speed and movement to determine the reader's ability.

The computer may be programmed to train the reader's eye movements, by increasing the speed of cursor movement as the reader's ability improves, and/or by moving the cursor over the whole text in a predetermined pattern designed to improve reading speed.

The size and configuration of the cursor may be changeable. In one arrangement, the cursor may simply underline the group of words being read at any instant. In a preferred arrangement, the cursor frames the word or group of words. If desired the text of the framed word or group of words may be highlighted by emboldening, enlarging or otherwise.

If desired, in highlighting a word or group of words, otherwise hidden text may be revealed.

These latter features are particularly helpful for use in reading text in cells of a spreadsheet.

The cursor may form an image which may appeal to children.

The features disclosed in the foregoing description, or the following claims, or the accompanying drawings, expressed in their specific forms or in terms of a means for performing the disclosed function, or a method or process for attaining the disclosed result, as appropriate, may, separately, or in any

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combination of such features, be utilised for realising the invention in diverse forms thereof.

2000-01-01

CLAIMS

1. A method of reading using a reading aid including a handle part which is adapted to be gripped manually at a location spaced from text to be read, and a cursor part attached to the handle part and extending transversely thereto, handle part and the cursor part being attached by a joint which permits the handle part to be moved relative to the cursor part during reading, the cursor part being positionable by manipulating the handle part to indicate a part of a line of the text being read, the method including moving the cursor part along the line and/or down the text during reading to indicate successive words or groups of words, whilst manipulating the handle part relative to the cursor part so that the handle part is maintained out of the reader's line of sight whilst the cursor part is maintained generally flat against the text.

2. A method according to claim 1 characterised in that the handle part is thin so that the handle part does not obscure the text being read.

3. A method according to claim 1 or 2 characterised in that the joint permits of substantially universal movement of the handle part relative to the cursor part.

4. A method according to claim 1 or 2 characterised in that the joint is configured to permit of substantially universal movement of the handle part relative to the cursor part, but to restrict rotation of the handle part with respect to the cursor part, about a longitudinal axis of the handle part

5. A method according to claim 4 characterised in that the joint is provided with a restraining part which is pivotally connected to the cursor part, and

which cooperates with the handle part so as to restrict rotation of the handle part with respect to the cursor part, about a longitudinal axis of the handle part.

6. A method according to any one of the preceding claims characterised in that the handle part is attached approximately centrally along the length of the cursor part whereby the reader's eyes are encouraged to concentrate on the centre of the text being read.
7. A method according to any one of the preceding claims characterised in that the text is on a computer screen, or is printed text.
8. A method according to claim 6 characterised in that the method is applied for reading a column in a newspaper or magazine, and the cursor part is of a length substantially equal to the width of the column being read.
9. A method according to any one of the preceding claims characterised in that the cursor has a length greater than two words of average length of the text.
10. A method according to any one of the preceding claims characterised in that the reading aid has separable handle and cursor parts, and the method includes selecting a cursor part from a set of cursor parts of different configuration and attaching the selected cursor part to the handle part.
11. A method according to any one of the preceding claims characterised in that the cursor part of the reading aid is opaque in which case the cursor part is during performance of the method, positioned beneath or above the word or group of words to be indicated.

12. A method according to any one of the preceding claims characterised in that a portion of the cursor part is transparent so that the method may include positioning the cursor part relative to the text such that at least a portion of the line of text to be indicated is visible to the reader through the transparent portion.

13. A method according to any one of the preceding claims characterised in that the cursor part includes a frame through which text may be read.

14. A method according to any one of the preceding claims characterised in that the method includes adjusting the length of the handle part to suit an individual reader and/or to enable the length of the handle part to be extended from a retracted stowed position for use.

15. A method according to any one of the preceding claims characterised in that the method includes unfolding the cursor part from a stowed position in which the cursor part and handle part are substantially parallel, to a position for use where the cursor part extends at substantially right angles relative to the handle part.

16. A method according to any one of claims 1 to 15 characterised in that the cursor part includes a pair of relatively foldable wings which may be folded so as to extend generally parallel to the handle part.

17. A method according to any one of the preceding claims characterised in that the cursor part is configured to form an image that may be attractive to children.

18. A method of reading substantially as hereinbefore described with reference to the accompanying drawings.
19. A reading aid for use in the method of any one of the preceding claims.
20. An aid according to claim 19 characterised in that the aid includes a writing implement integrally provided with the handle part.
21. An aid according to claim 20 characterised in that a writing point is provided at an end of the handle part remote from the cursor part.
22. An aid according to claim 20 characterised in that the handle part includes a main stem and a branch which includes the writing implement.
23. An aid according to claim 20 characterised in that the handle part includes a main stem and a branch, the main stem including the writing implement and the branch including the cursor part.
24. A reading aid including a cursor part and a handle part, the cursor part being attached to the handle part by a joint, characterised in that the joint is configured to permit of substantially universal movement of the handle part relative to the cursor part, but to restrict rotation of the handle part with respect to the cursor part, about a longitudinal axis of the handle part
25. A reading aid including a cursor part and a handle part, characterised in that the cursor part is configured to form an image which may be attractive to children.

26. A reading aid substantially as hereinbefore described with reference to and as shown in any of the accompanying drawings.

27. A computer when programmed to aid reading or to train a reader, there being means to display on a display screen of the computer concurrently with displaying on the display screen text to be read, a cursor, and the computer being programmed to position the cursor to indicate a word or group of words of the line of the text being read and to move the cursor along the line during reading successively to indicate words.

28. A computer according to claim 27 characterised in that the cursor has a length greater than two words of average length of the text

29. A computer according to claim 27 or 28 characterised in that the computer is programmed so that the speed at which the cursor is moved along the line of text and/or the number of words indicated may be changed as a reader's ability improves.

30. A computer according to any one of claim 27, 28 and 29 characterised in that the computer is programmed to move the cursor relative to the text being read in a predetermined path over the text as a whole in such manner as to improve the speed of reading.

31. A computer according to any one of claims 27 to 30 characterised in that the cursor frames the indicated word or group of words and enlarges the text of the frame compared with the remaining text.

32. A computer according to any one of claims 27 to 31 characterised in that the cursor forms an image that may be attractive to children.

33. A method of operating a computer according to any one of claims 27 to 32, including the steps of moving a cursor relative to text to be read on a display screen successively to indicate words or groups of words of a line of text to be read.

34. A method according to claim 33 characterised in that the method includes changing the size and/or shape and/or colour of the cursor to suit different reader' abilities and/or the nature of the text being read.

35. A method of assessing reading ability including the steps of displaying on a computer display screen concurrently with text to be read, a cursor, manually moving the cursor relative to the text to indicate lengths of the text sequentially being read, and analysing from the speed and sequence of cursor movements, reading ability.

36. Any novel feature or novel combination of features described herein and/or in the accompanying drawings.

1 / 6

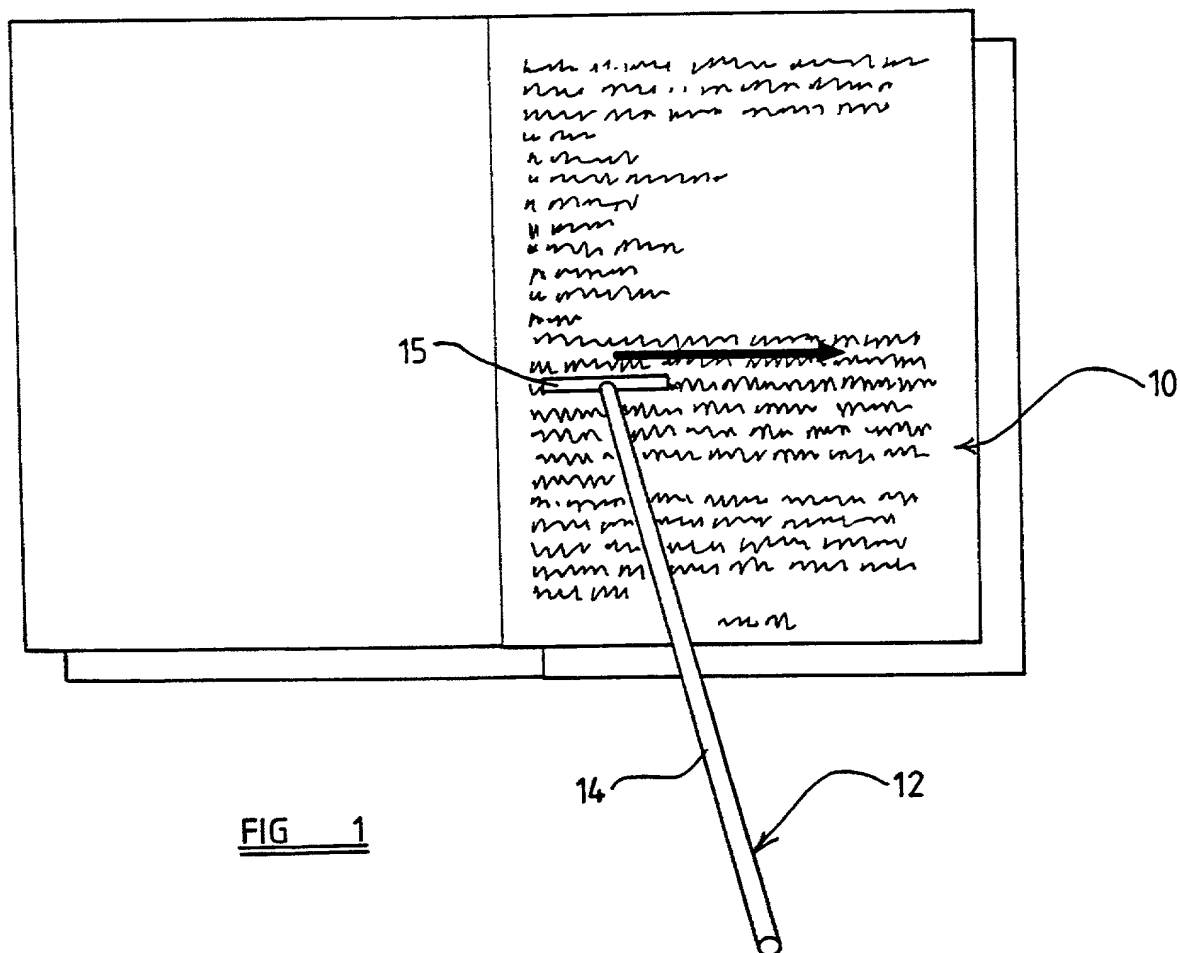


FIG 1

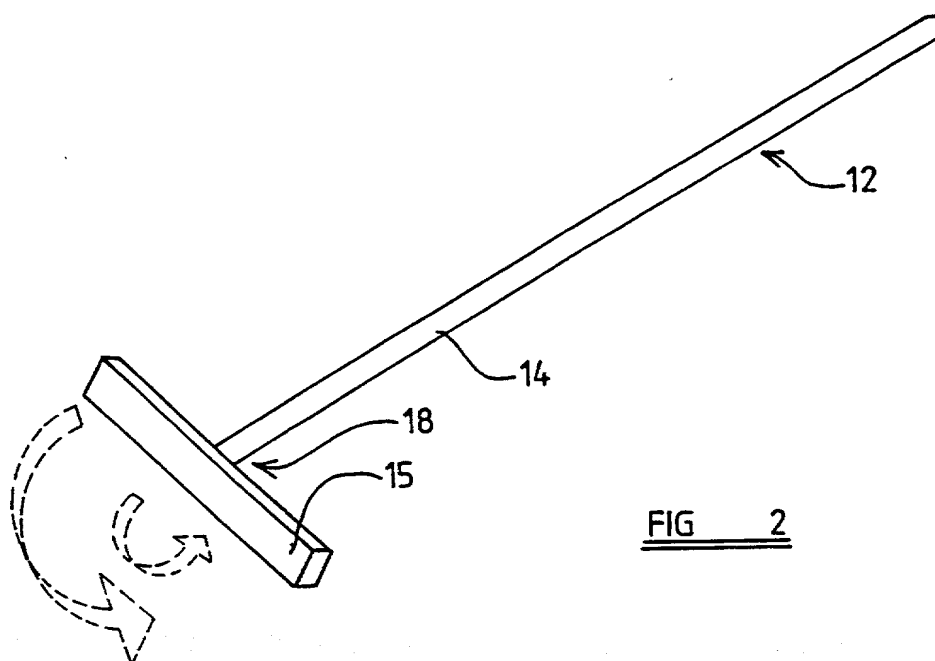


FIG 2

2 / 6

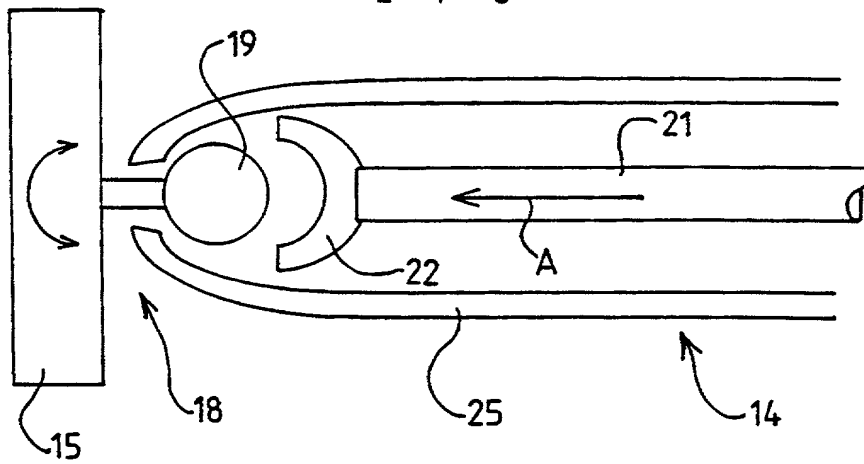


FIG 3

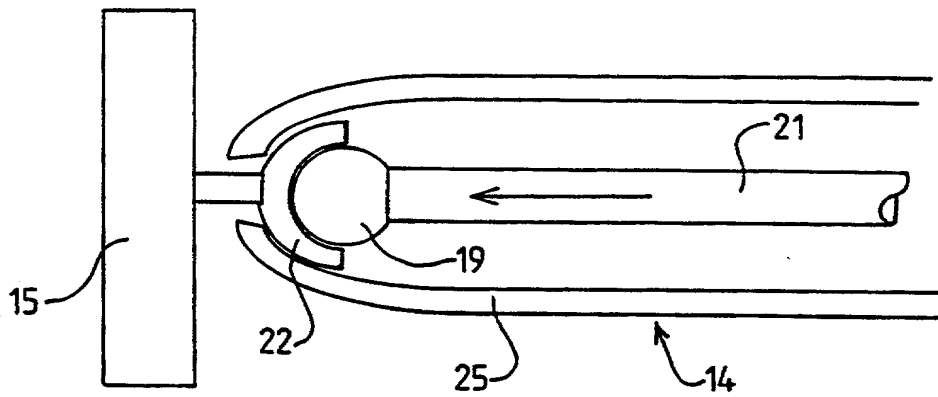


FIG 4

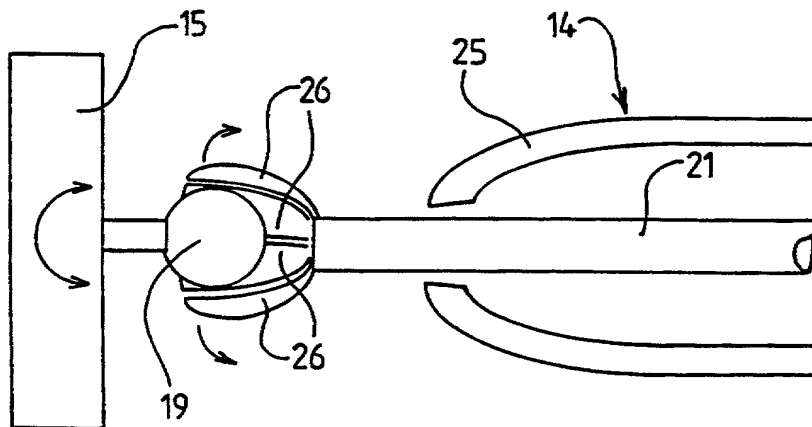
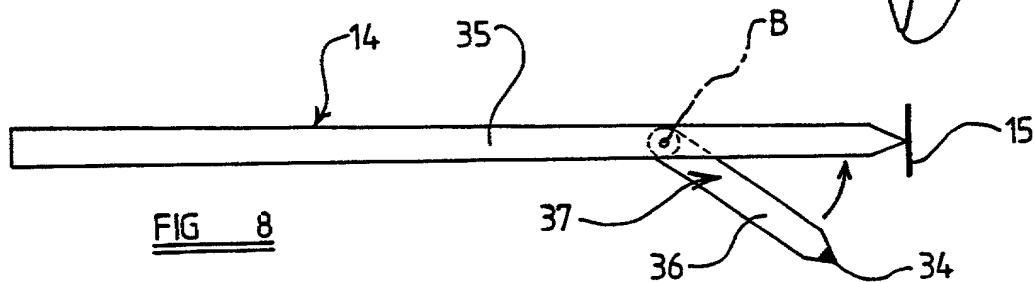
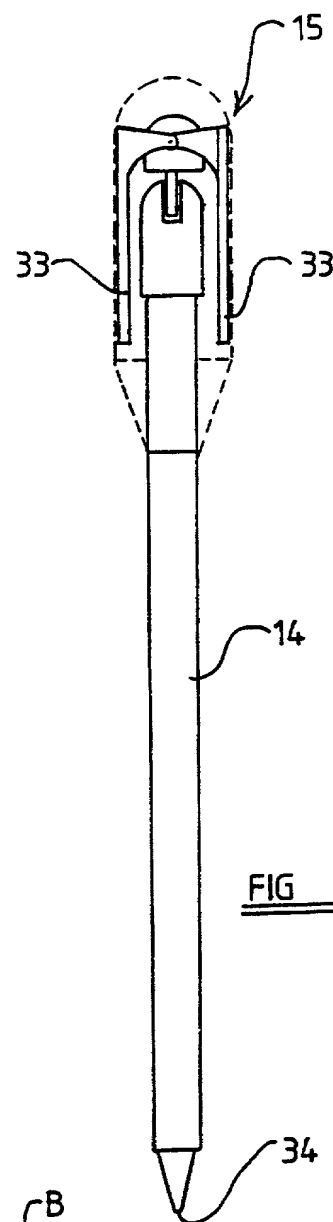
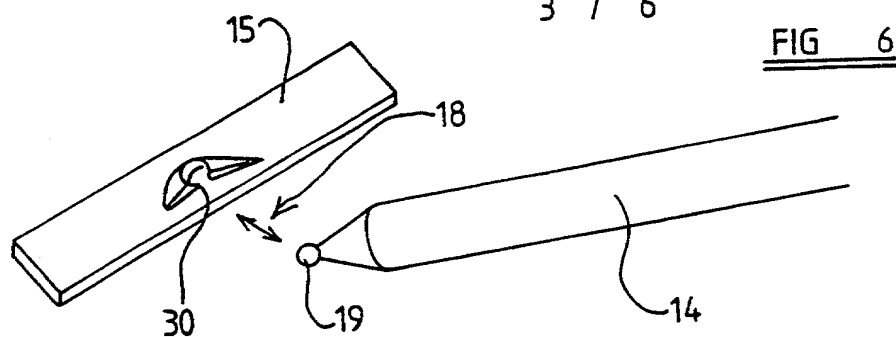
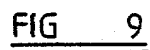
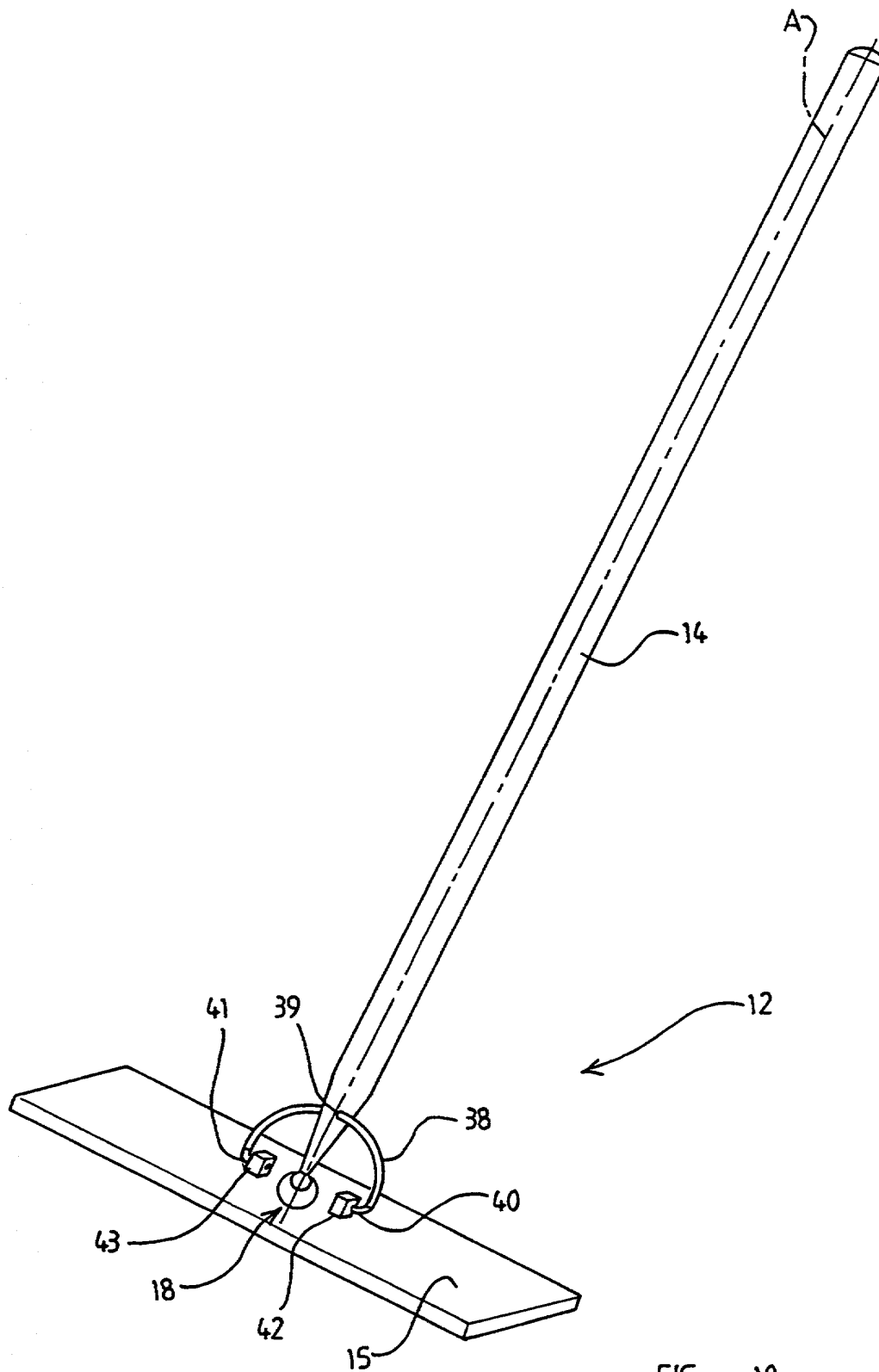


FIG 5

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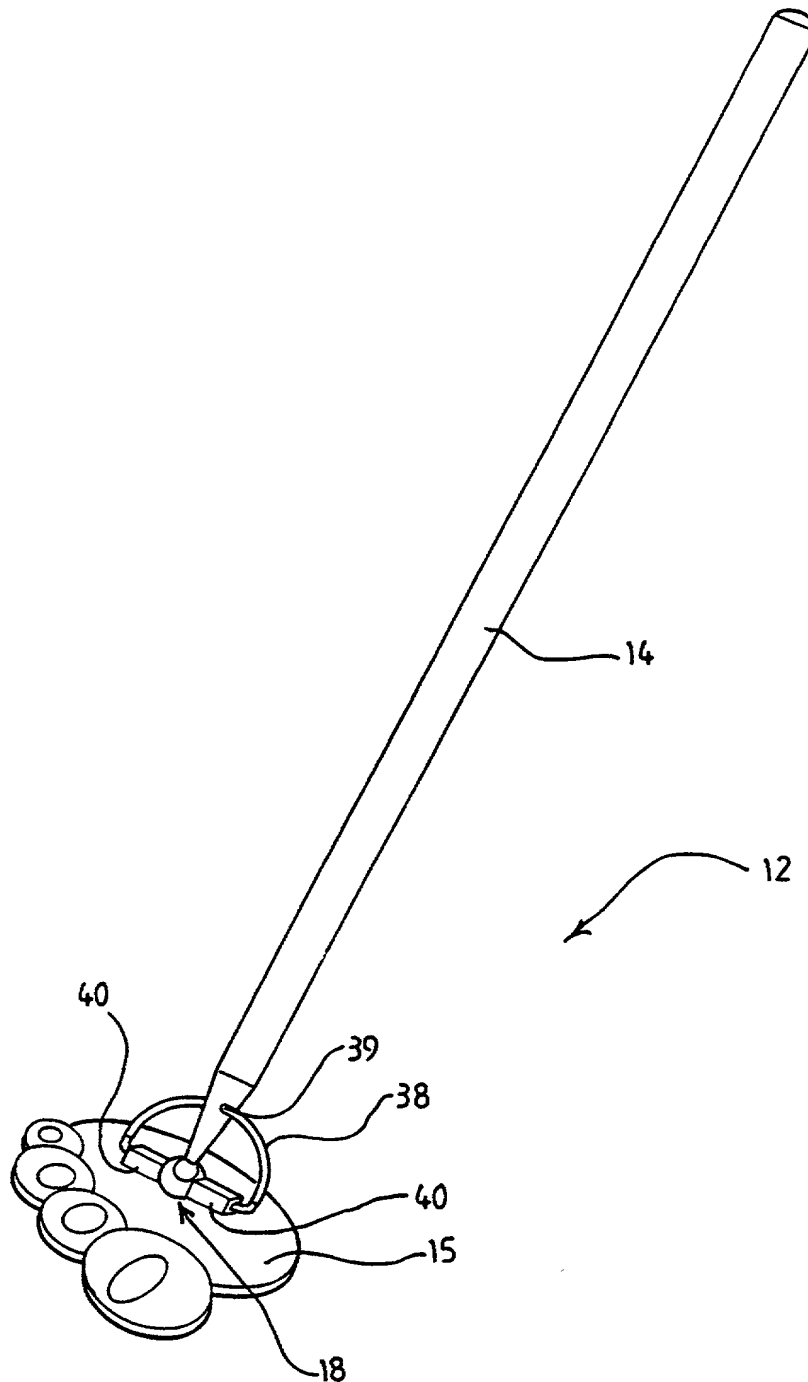


FIG 11

DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name; I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled "Reading/Teaching Aid

" the specification of which (check one): ☐ is attached hereto; ☐ was filed on _____ as Application Serial No. _____ and was amended on _____ (if applicable); ☒ was filed as PCT International Application No. GB00/03049 on 8 August 2000 and was amended under Article 19 on _____ (if applicable). I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment(s) referred to above. I acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. §1.56.

I hereby claim foreign priority benefits under 35 U.S.C. §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

<u>9919019.1</u>	<u>GB</u>	<u>13 August 1999</u>	Priority Claimed
(Application Serial Number)	(Country)	(Day/Month/Year Filed)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
(Application Serial Number)	(Country)	(Day/Month/Year Filed)	

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

_____	_____
(Application Serial Number)	(Day/Month/Year Filed)
_____	_____
(Application Serial Number)	(Day/Month/Year Filed)

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 C.F.R. §1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

_____	_____	_____
(Application Serial Number)	(Day/Month/Year Filed)	(Status-Patented, Pending or Abandoned)
_____	_____	_____
(Application Serial Number)	(Day/Month/Year Filed)	(Status-Patented, Pending or Abandoned)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POWER OF ATTORNEY: I hereby appoint as my attorneys, with full powers of substitution and revocation, to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

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Allen H. Gerstein (22,218)
Nate F. Scarpelli (22,320)
Michael F. Borun (25,447)
Carl E. Moore, Jr. (26,487)
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State or Country <u>United Kingdom</u>	State or Country <u>United Kingdom</u>
Date <input checked="" type="checkbox"/> <u>17/1/02</u>	Signature <input checked="" type="checkbox"/> <u>Arvind Khandubhai Mistry</u>

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State or Country	State or Country
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Fourth Joint Inventor, if any	Citizenship
Residence Address - Street	Post Office Address - Street
City (Zip)	City (Zip)
State or Country	State or Country
Date <input checked="" type="checkbox"/>	Signature <input checked="" type="checkbox"/>

APPLICABLE RULES AND STATUTES

37 CFR 1.56. DUTY OF DISCLOSURE - INFORMATION MATERIAL TO PATENTABILITY (Applicable Portion)

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentability defines, to make sure that any material information contained therein is disclosed to the Office.

Information relating to the following factual situations enumerated in 35 USC 102 and 103 may be considered material under 37 CFR 1.56(a).

35 U.S.C. 102. CONDITIONS FOR PATENTABILITY: NOVELTY AND LOSS OF RIGHT TO PATENT

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or
- (c) he has abandoned the invention, or
- (d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraph (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent, or
- (f) he did not himself invent the subject matter sought to be patented, or
- (g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

35 U.S.C. 103. CONDITIONS FOR PATENTABILITY; NON-OBVIOUS SUBJECT MATTER (Applicable Portion)

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

35 U.S.C. 112. SPECIFICATION (Applicable Portion)

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.